

May 31, 2005

Marlene H. Dortch, Secretary  
Federal Communications Commission  
Office of the Secretary  
445 12th Street, SW  
Washington, D.C. 20554

RE: 4.9 GHz Planning Guidelines for Region 5, 700 MHz Planning Committee - WT Docket No. 00-32

Please accept these 4.9 GHz guidelines to the Region 5, 700 MHz Plan. These guidelines were filed on April 29, 2005 under Docket WT 02-378 as a modification to the Region 5, 700 MHz plan. I was informed by staff in the Public Safety and Critical Infrastructure Division that these guidelines should be a stand alone plan and filed under Docket 00-32. I request that due the confusion on the proper filing docket that these guidelines be accepted as timely filed. These guidelines are in response to FCC Docket 00-32 giving the 700 MHz Regions the option to include 4.9 GHz operational guidelines in the Region's plan. Region 5 held a series of workgroup meetings over the last 18 months to develop recommendations for the full committee to consider for adoption.

A Committee meeting of Region 5 was held on April 14, 2005 to consider the workgroup recommendations. Each section of the guidelines was reviewed and debated. No changes were made to the language recommended by the workgroup. The guidelines were approved by unanimous vote of the Committee to be included in the Region 5 plan.

The workgroup meeting schedule was published in the CPRA COMMLINK newsletter and by email list serve as specified in the Region 5 plan. Notice of the April 14<sup>th</sup> Committee meeting was published in the March and April 2005 COMMLINK editions. There was also an FCC Public notice of the meeting. A reminder was sent out on the email list serve.

Sincerely,

David Buchanan  
Chairperson  
Region 5, 700 MHz Plan Committee

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## **4.9 GHz Planning Guidelines**

**For**

**Region 5, 700 MHz Regional Plan Committee**

**Southern California**

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### 1 Introduction

The Region 5, 700 MHz Regional Planning Committee<sup>1</sup> is exercising the option to establish a regional plan to cover all 4.9 GHz operations within the Region. The FCC in Docket 00-32 allocated 50 MHz of spectrum for public safety use. This spectrum is intended for short range “hot spot” high-speed data transmissions. It is possible, and some agencies may want, to install systems providing seamless coverage. Although 50 MHz is more spectrum than was previously allocated to public safety use, this allocation will provide only a few channels that can be intensely reused. The spectrum is available to all public safety agencies to use in their geographical boundaries on a shared basis. This will result in multiple agencies operating on the same channels in the same geographical area. For this to work all agencies must cooperate in establishing and operating 4.9 GHz systems within the region.

### 2 4.9 GHz Planning Guidelines

The 4.9 GHz band is equally shared by all public safety agencies operating within their geographical boundaries. The spectrum allocation, while large in traditional terms, is a limited resource for the intended broadband data uses. This will require agencies operating in the same geographical area to cooperate in sharing the spectrum. As an example a city, County and the State would operate in the same geographical area. If multiple services (like police, fire and public works) from each agency decided to operate independent systems, the broadband channels would be quickly exhausted. Sharing will be important in this band. These guidelines are intended to facilitate that sharing.

Primary use of the band is for Incident Area Networks (IAN), Jurisdictional Area Networks (JAN) and Personal Area Networks (PAN). Operations on JAN and PAN networks are secondary to IAN operations.

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<sup>1</sup> See Region 5, 700 MHz Regional Plan for details of the Committee structure and operating rules. The 700 MHz plan was filed and approved under FCC docket 02-378.

In order to share the spectrum and to foster interoperability, Agencies are encouraged to purchase equipment that is based on open standards and will operate between different vendors. Agencies are encouraged to develop multi-agency systems for JAN networks. Agencies should always coordinate JAN networks with all agencies that might operate in the same geographical area.

This Committee will facilitate use of the CAPRAD system to document system information that is available to all public safety agencies. This will enhance and enable agencies sharing of the spectrum in this band.

### **3 Point-To-Point Links**

Usage of point-to-point links is expected. Agencies are encouraged to use the one MHz channels (five each at the bottom and top of the band) for point-to-point links. Agencies should avoid these channels for access point operations. Under FCC rules, temporary links have primary status. Permanent links are secondary. However, many areas of Southern California are very rural and can benefit greatly from permanent links connecting remote radio sites. All agencies are encouraged to check the CAPRAD or FCC database before establishing a temporary link and therefore protect permanent links to the greatest extent possible.

### **4 Interoperability**

All IAN events utilizing the 4.9 GHz band should operate under the State's Standardized Emergency Management System. A communications officer position should be assigned to manage the 4.9 GHz band plan. The State's priority list should be used to resolve conflicts of use:

Priority 1      Disaster and extreme emergency operations for mutual aid and interagency communications

Priority 2      Emergency or urgent operations involving imminent danger to the safety of life or property

Priority 3      Special event control activities, generally of a per-planned nature, and generally involving joint participation of two or more agencies

Priority 3a     Drills, tests and exercises

Priority 4      Single agency secondary communications

### **5 Air-to-Ground Video**

Air to Ground one way video links were identified by the workgroup members as a high priority use for this band. This need was identified for Los Angeles County agencies and some Orange County agencies. Other agencies in the Region may want

to operate air to ground video in the future. The Committee has worked with manufactures of the video equipment to develop transmitters that only occupy 2.5 MHz of bandwidth for acceptable video quality. The Region also is planning some testing to determine the impact on the Radio Astronomy site at Goldstone. Also the testing will quantify the interference impact to ground hotspots. The Committee considers ground IAN operations to have priority, however airborne video surveillance is routinely a vital part of incident management. The committee recognizes that air to ground video will require a waiver by the Commission. The Committee, will use the test results to assist agencies in applying for a waiver. At this time, the Committee recommends that four 2.5 MHz channels be created from channels 6 and 7. All air to ground video links should operate on those channels.